

Work Order ID 79104

January-20-12 6:59:30 AM

79104

Page 1

Item ID: D412-742-043

Accept

N900040100

Setup Start

NS1

Revision ID: ~~001~~

Stop

NS2

Item Name: Replacement Float Skidtube

Start Date: 1/20/12 Start Qty: 1.00

1

Cust Item ID:

Required Date: 1/23/12 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3391

I

100

0.00

100

DOCUMENT CONTROL

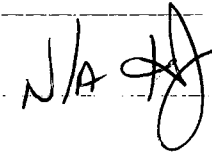
DC

Memo

0.00

Document Control

If D412-742-043 is a W/O on it's own,
Photocopy bluefile and create labels per PPP D412-742-043 CHG005

N/A 

Work Order ID 79104

January-20-12 6:59:30 AM

79104

Page 2

Item ID: D412-742-043 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: U/R Stop ***NS2***
 Item Name: Replacement Float Skidtube
 Start Date: 1/20/12 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 1/23/12 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: Date: Tooling: Date: Run Start ***NR1***
 QC: Date: SPC (Y/N): Date: Stop ***NR2***

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 110 | HandFinishing | 0.00 | | | | | | | |
| *110* | | | | | | | | | |
| HandFinish | Memo | 0.00 | | | | | | | |
| Hand Finishing | 1-Install tubes together and seal them all the way around using Sikaflex 241/291. Ensure tube ends line-up with saddle holes for proper alignment. using 7/16" "T" Pins. A/RSikaflex-241/-291 <u>11119508</u> C Expiry date: <u>12108</u> | | | | | | | | |
| | 2-Install wearplates as per Dwg D3391. Ensure that plastic washers are against wearplate, then topped with the SS washer. Seal all bolts with sikaflex except ones with inserts on inside of tube ,hand tighten only bolts with no sikaflex. A/RSikaflex-241/-291 <u>11119509</u> Expiry date: <u>12108</u> | | | | | | | | |
| | 3-Remove "T" pins once sikaflex is dry. | | | | | | | | |
| | 4-Coat all exposed hardware with LPS Procyon. Remove any excess off with MEK degreaser. A/RLPS Procyon <u>11114596</u> | | | | | | | | |

Handwritten signature: Al Wlodz

Work Order ID 79104

79104

Page 3

January-20-12 6:59:30 AM

Item ID: D412-742-043 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: U/R Stop ***NS2***
 Item Name: Replacement Float Skidtube
 Start Date: 1/20/12 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 1/23/12 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 120 | QC5- Inspect part completeness to step on W/O | 0.00 | | | | | | | |
| *120* | | 0.00 | | | | | | | |
| QC | Memo | | | | | | | | |
| Quality Control | | | | | | | | | |
| 130 | | 0.00 | | | | | | | |
| *130* | Packaging | 0.00 | | | | | | | |
| Packaging | Memo | | | | | | | | |
| Packaging | Identify and pack for shipping as per PPP D412-742-043 | | | | | | | | |
| | Location: _____ | | | | | | | | |
| | PPP Rev: _____ | | | | | | | | |
| 140 | QC21- Final Inspection - Work Order Release | 0.00 | | | | | | | |
| *140* | | 0.00 | | | | | | | |
| QC | Memo | | | | | | | | |
| Quality Control | | | | | | | | | |

W12-02-24

Picklist Print

January-20-12 6:59:29 AM

Page 1

Work Order ID: 79104

Parent Item: D412-742-043

Parent Item Name: Replacement Float Skidtube

Start Date: 1/20/12

Required Date: 1/23/12

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev A 05.10.13 New Issue KJ/JLM
 IPP Rev 06.02.13 ECN 773 dwg @ rev.D EC
 IPP Rev:C 07-05-28 As per Rev F JLM
 IPP Rev:D 07-12-04 ECN 1072 DD verified by:JLM
 IPP Rev:E 08-09-08 ecn 08-510 DD verified by:EC IPP Rev:F 11.11.01 as per DSI9517
 REV.B DD verified by:EC

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|-----------------|-------------|--------------|---------------|----------------|--------|
| D3391-021 Fwd Tube Assembly | | Manufactured | No | | | 110 | Each | 0.0000 | | | | | |
| D3391-023 Mid Tube Assembly | | Manufactured | No | | | 110 | Each | 1.0000 | | | | | |
| | | | | <u>Location</u> | | <u>Loc Qty</u> | | <u>Loc Code</u> | | | | | |
| | | | | FP | | 1 | | | | | | | |
| | | | | GA | | -1 | | | | | | | |
| | | | | ST | | 1 | | | | | | | |
| | | | | 77401 | | 1 | | | | | | | |
| D3391-025 Aft Tube Assembly | | Manufactured | No | | | 110 | Each | 2.0000 | | | | | |
| | | | | <u>Location</u> | | <u>Loc Qty</u> | | <u>Loc Code</u> | | | | | |
| | | | | FP001 | | 1 | | | | | | | |
| | | | | 73018 | | 1 | | | | | | | |
| | | | | PAKG | | 1 | | | | | | | |
| | | | | 77379 | | 1 | | | | | | | |

B 77387 U 12/01/12
B 77391 U 11/01/12
B 77379 U 12/01/12

Picklist Print

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Page 2

Work Order ID: 79104

Parent Item: D412-742-043

Parent Item Name: Replacement Float Skidtube

Start Date: 1/20/12

Required Date: 1/23/12

Start Qty: 1.00

Required Qty: 1.00

AN3C4A Purchased No 110 Each 2,823.0000 24 24 12/01/20
BOLT

| <u>Location</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|-----------------|----------------|-----------------|
| ST350 | 2823 | |
| 117313 | 2 | |
| 117688 | 5 | |
| 117872 | 10 | |
| 118112 | 16 | |
| 118451 | 2 | |
| 118838 | 4 | |
| 119749 | 784 | |
| 120187 | 2000 | |

AN3C6A Purchased No 110 Each 132.0000 10 10 12/01/20
BOLT

| <u>Location</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|-----------------|----------------|-----------------|
| FP001 | 1 | |
| 111982 | 1 | |
| ST351 | 131 | |
| 111982 | 2 | |
| 116419 | 23 | |
| 116549 | 2 | |
| 116704 | 12 | |
| 117619 | 10 | |
| 117688 | 1 | |
| 117872 | 5 | |
| 118422 | 13 | |
| 119449 | 53 | |
| 119749 | 10 | |

January-20-12 6:59:30 AM

Shop Packet Print

Page 2

Picklist Print

January-20-12 6:59:30 AM

Page 3

Work Order ID: 79104

Parent Item: D412-742-043

Parent Item Name: Replacement Float Skidtube

Start Date: 1/20/12

Required Date: 1/23/12

Start Qty: 1.00

Required Qty: 1.00

AN3C7A Purchased No 110 Each 97.0000

BOLT

4 4
MU 12/6/12

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| ST351 | 97 | |
| 113149 | 14 | |
| 116169 | 1 | |
| 117313 | 10 | |
| 117619 | 12 | |
| 117688 | 6 | |
| 118422 | 4 | |
| 119749 | 50 | |

AN960C10L ~~X~~ NAS1149C0332R Purchased No

washer

110 Each 0.0000

38 38
11119736 (x8) MU 12/6/12

D4095-041 Manufactured No

Wearplate Assembly

110 Each 4.0000

1 1
MU 12/6/12

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| FP001 | 4 | |
| 77438 | 4 | |

D4095-043 Manufactured No

Wearplate Assembly

110 Each 2.0000

1 1
1377437 (x1) MU 12/6/12

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| FP001 | 2 | |
| 76535 | 2 | |

D4095-045 Manufactured No

Wearplate Assembly

110 Each 4.0000

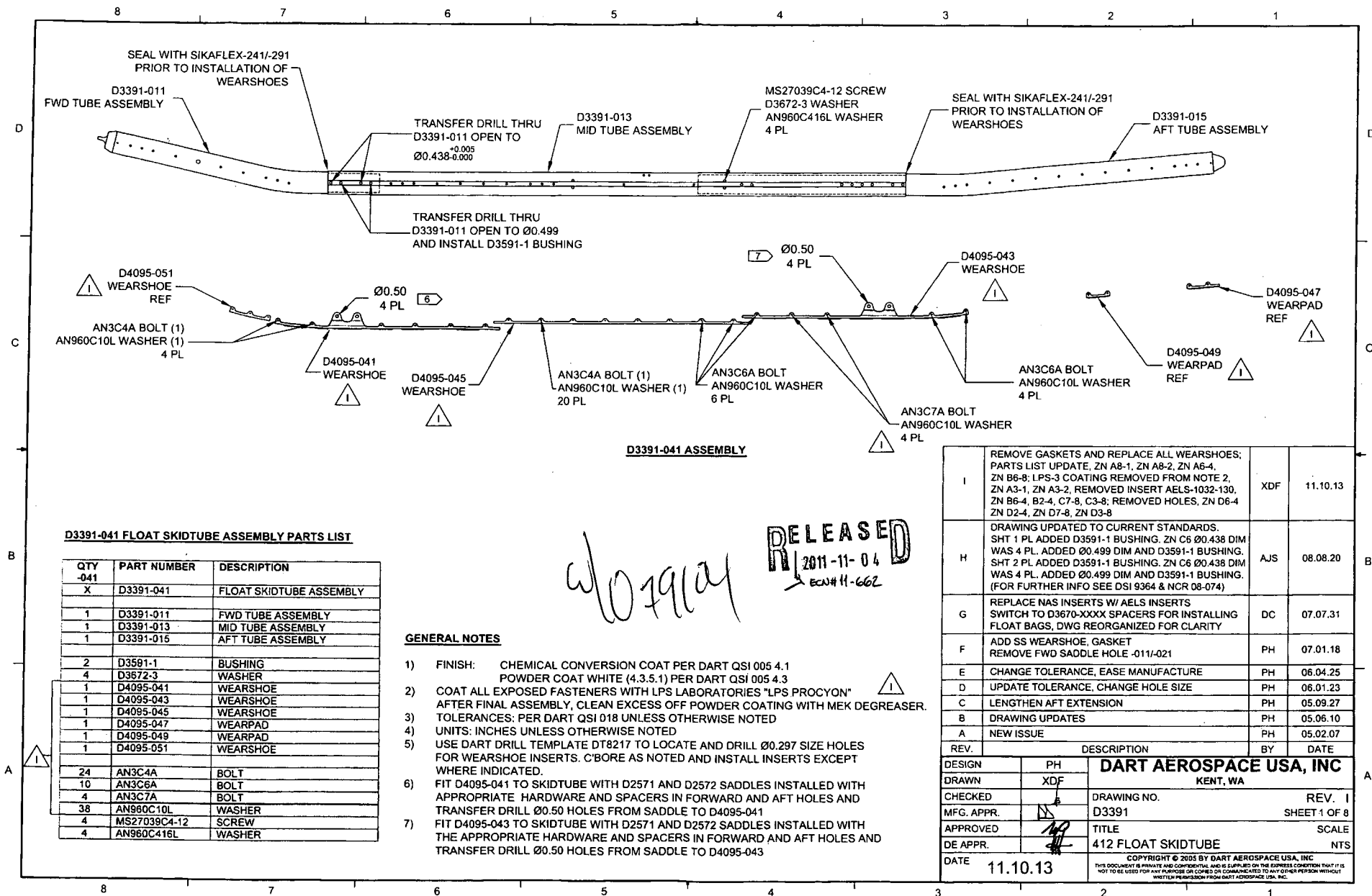
1 1
MU 12/6/12

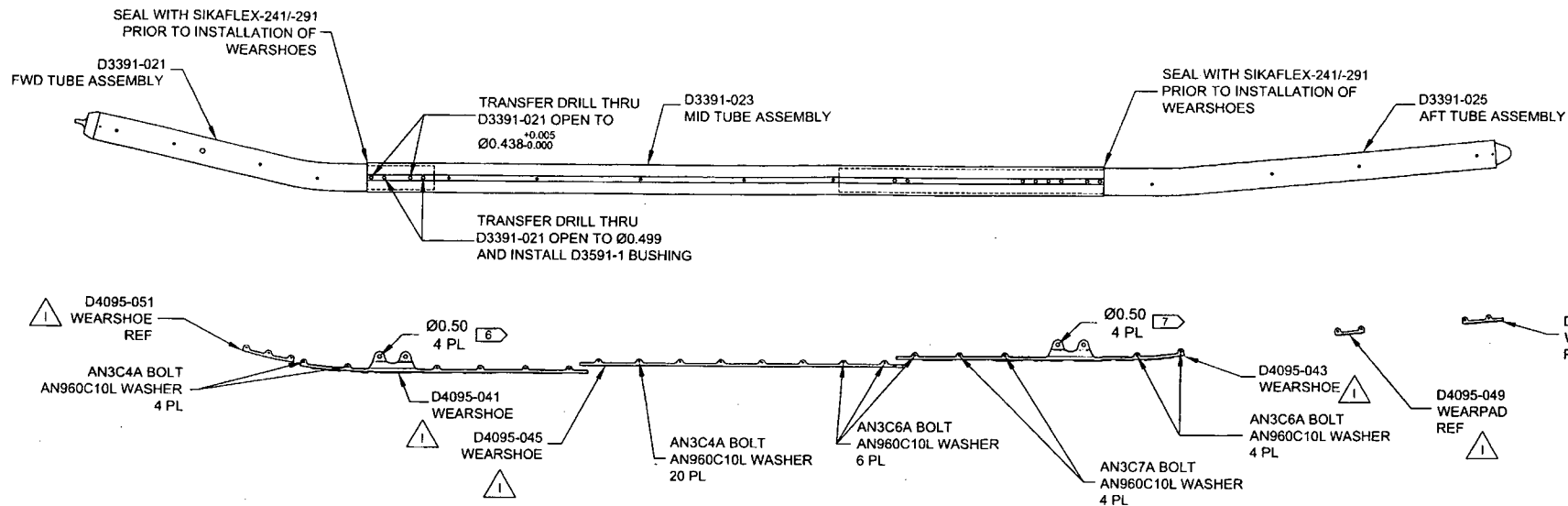
| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| FP001 | 4 | |
| 77737 | 4 | |

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Page 3





D3391-043 ASSEMBLY

D3391-043 FLOAT SKIDTUBE ASSEMBLY PARTS LIST

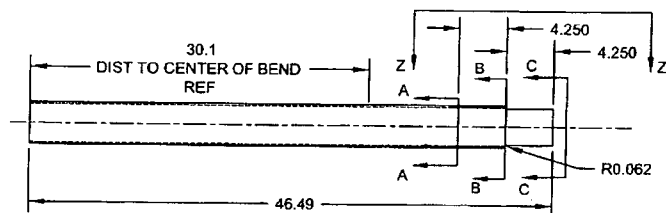
| QTY | PART NUMBER | DESCRIPTION |
|-----|-------------|-------------------------|
| X | D3391-043 | FLOAT SKIDTUBE ASSEMBLY |
| 1 | D3391-021 | FWD TUBE ASSEMBLY |
| 1 | D3391-023 | MID TUBE ASSEMBLY |
| 1 | D3391-025 | AFT TUBE ASSEMBLY |
| 2 | D3591-1 | BUSHING |
| 1 | D4095-041 | WEARSHOE |
| 1 | D4095-043 | WEARSHOE |
| 1 | D4095-045 | WEARSHOE |
| 1 | D4095-047 | WEARSHOE |
| 1 | D4095-049 | WEARPAD |
| 1 | D4095-051 | WEARSHOE |
| 24 | AN3C4A | BOLT |
| 10 | AN3C6A | BOLT |
| 4 | AN3C7A | BOLT |
| 38 | AN960C10L | WASHER |

GENERAL NOTES

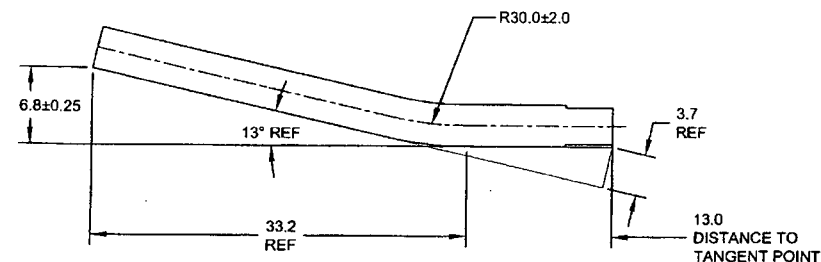
- FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON"
AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.
- TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- UNITS: INCHES UNLESS OTHERWISE NOTED
- USE DART DRILL TEMPLATE DT8217 TO LOCATE AND DRILL Ø0.297 SIZE HOLES FOR WEARSHOE INSERTS. C'BORE AS NOTED AND INSTALL INSERTS EXCEPT WHERE INDICATED.
- FIT D4095-041 TO SKIDTUBE WITH D2571 AND D2572 SADDLES INSTALLED WITH APPROPRIATE HARDWARE AND SPACERS IN FORWARD AND AFT HOLES AND TRANSFER DRILL Ø0.50 HOLES FROM SADDLE TO D4095-041
- FIT D4095-043 TO SKIDTUBE WITH D2571 AND D2572 SADDLES INSTALLED WITH THE APPROPRIATE HARDWARE AND SPACERS IN FORWARD AND AFT HOLES AND TRANSFER DRILL Ø0.50 HOLES FROM SADDLE TO D4095-043

RELEASED
2011-11-04

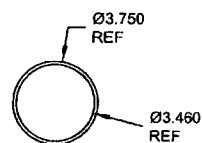
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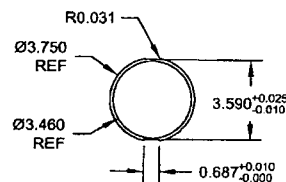
D3391-1 CUTTING DETAIL
(MAKE FROM D6013-047 SKIDTUBE MATERIAL)



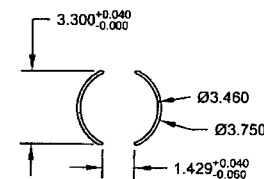
D3391-011/-021 BENDING DETAIL
(MAKE FROM D3391-1)



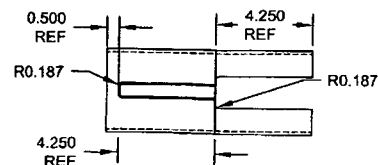
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SECTION B-B
SCALE 2X



SECTION C-C
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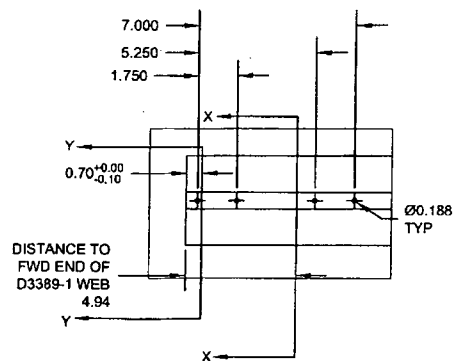


VIEW Z-Z
SCALE 2X

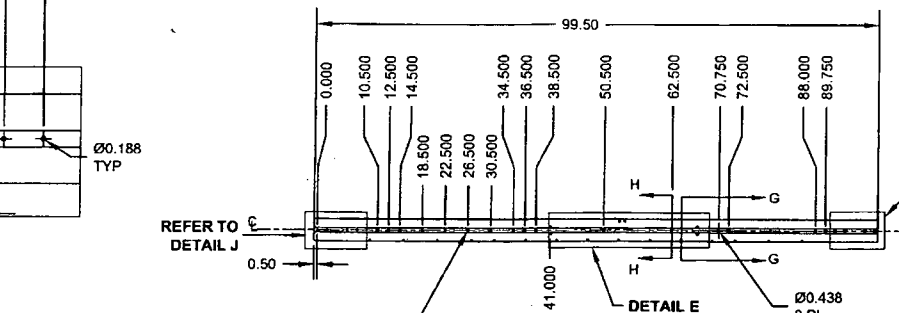
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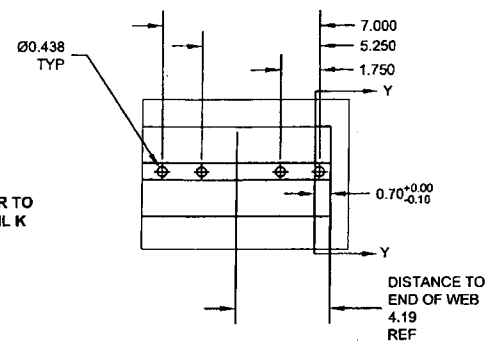
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DETAIL J
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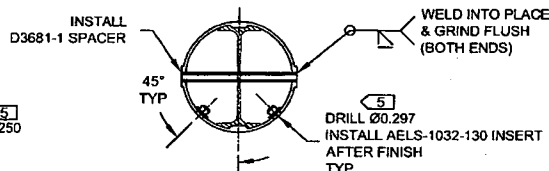
D3391-013 ASSEMBLY DETAIL



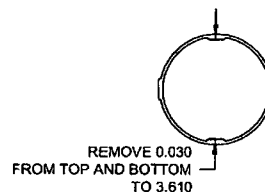
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SCALE 4X



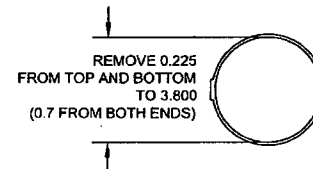
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SCALE 5X



SECTION H-H
SCALE 5X



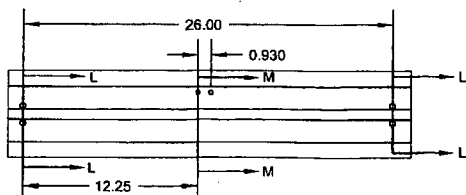
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SCALE 5X



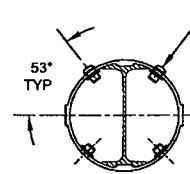
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D3391-013 MID TUBE ASSEMBLY PARTS LIST

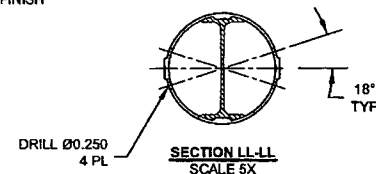
| QTY | PART NUMBER | DESCRIPTION |
|------|---------------|-------------------|
| -013 | | |
| X | D3391-013 | MID TUBE ASSEMBLY |
| 1 | D2500-1-100 | EXTRUSION |
| 1 | D3389-1 | WEB |
| 4 | D3672-1 | WASHER |
| 4 | D3672-3 | WASHER |
| 12 | D3681-1 | SPACER |
| 24 | AELS-1032-130 | INSERT |
| 4 | ALS4-428-165 | INSERT |
| 4 | AN960C10L | WASHER |
| 4 | AN960C416L | WASHER |
| 4 | MS27039C1-09 | SCREW |
| 4 | MS27039C4-08 | SCREW |



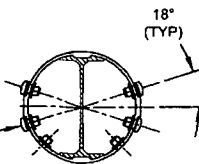
DETAIL E
SCALE NONE



SECTION M-M
SCALE 5X



SECTION LL-LL
SCALE 5X



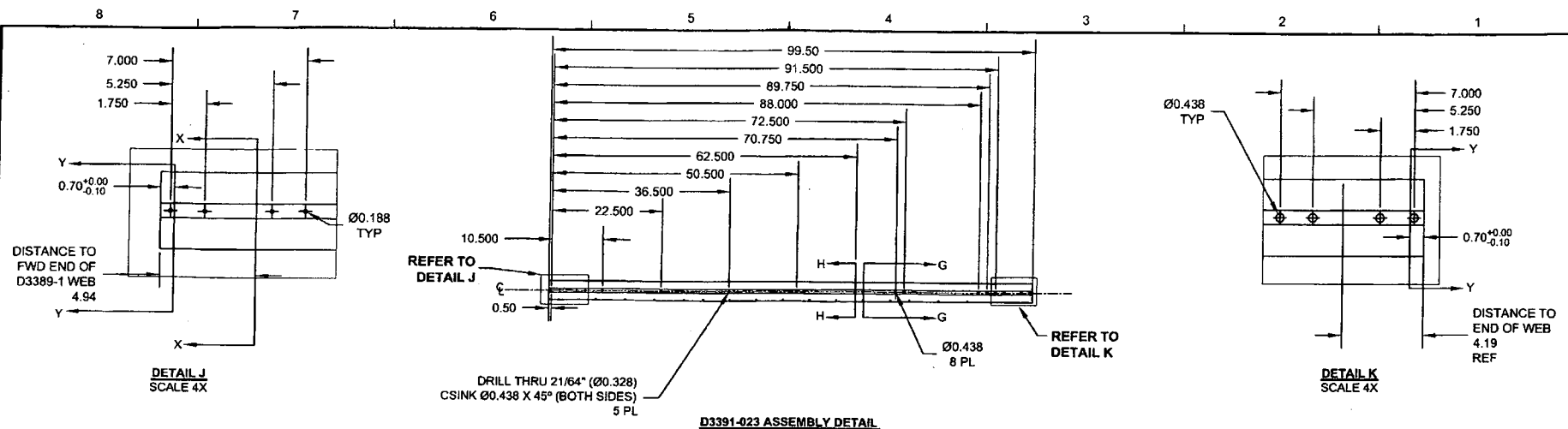
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SCALE 5X

D3391-013 MID TUBE ASSEMBLY

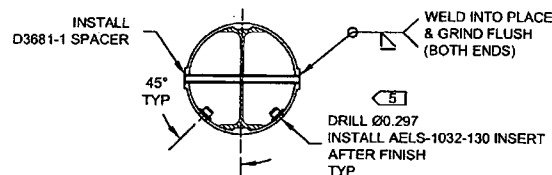
- 1) MATERIAL: MAKE FROM D2500-1-100 EXTRUSION
- 2) INSTALL D3389-1 WEB TO OUTER TUBE USING SIKAFLEX-241/291 PER QSI 015
- 3) WELDING: PER DART QSI 004

| | | | |
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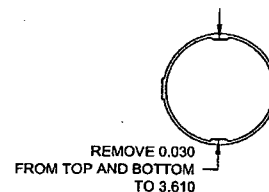
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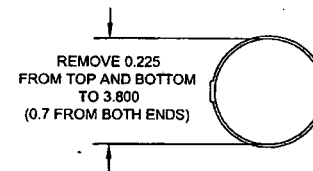
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SCALE 5X



SECTION H-H
SCALE 5X



SECTION X-X
SCALE 5X



SECTION Y-Y
SCALE 5X

D3391-023 MID TUBE ASSEMBLY PARTS LIST

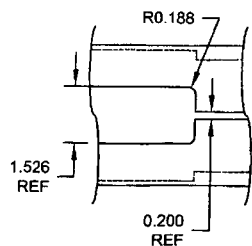
| QTY - 023 | PART NUMBER | DESCRIPTION |
|-----------|---------------|-------------------|
| X | D3391-023 | MID TUBE ASSEMBLY |
| 1 | D2500-1-100 | EXTRUSION |
| 1 | D3389-1 | WEB |
| 5 | D3681-1 | SPACER |
| 20 | AELS-1032-130 | INSERT |

D3391-023 MID TUBE ASSEMBLY

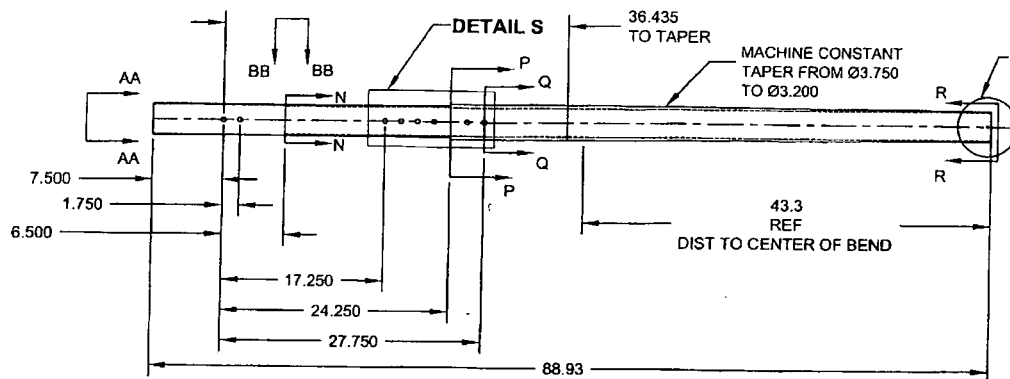
- 1) MATERIAL: MAKE FROM D2500-1-100 EXTRUSION
- 2) INSTALL D3389-1 WEB TO OUTER TUBE USING SIKAFLEX-241/291 PER QSI 015
- 3) WELDING: PER DART QSI 004

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2011-11-04

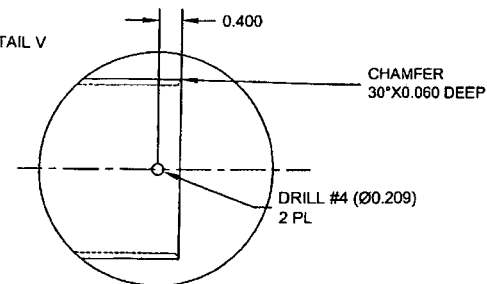
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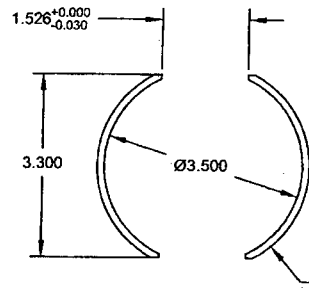
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SCALE 4X



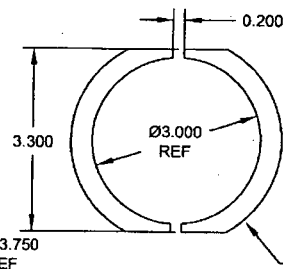
D3391-3 AFT DRILLING AND CUTTING DETAIL
(MAKE FROM D6014-090 SKIDTUBE MATERIAL)



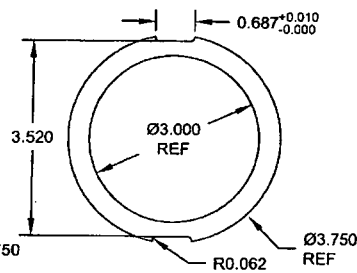
DETAIL V
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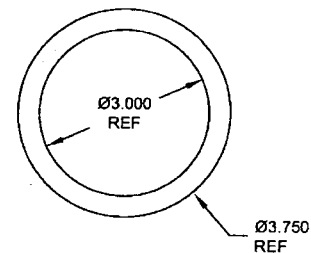
SECTION AA-AA
SCALE 6X



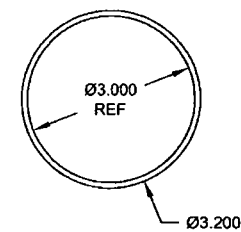
SECTION N-N
SCALE 6X



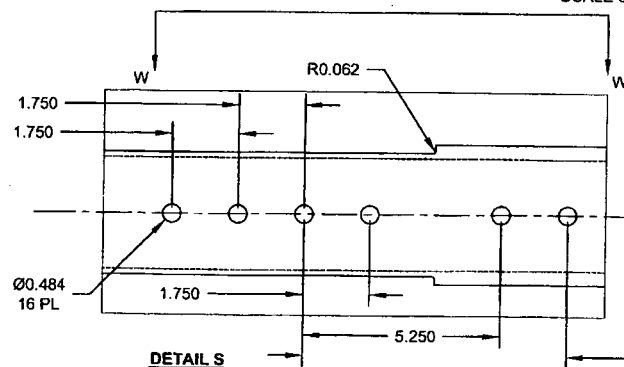
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SCALE 6X



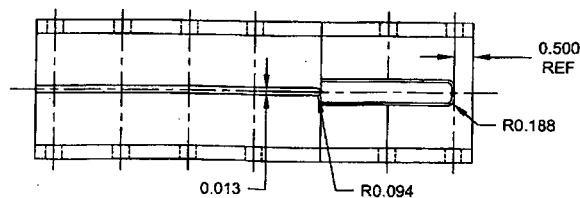
SECTION Q-Q
SCALE 6X



SECTION R-R
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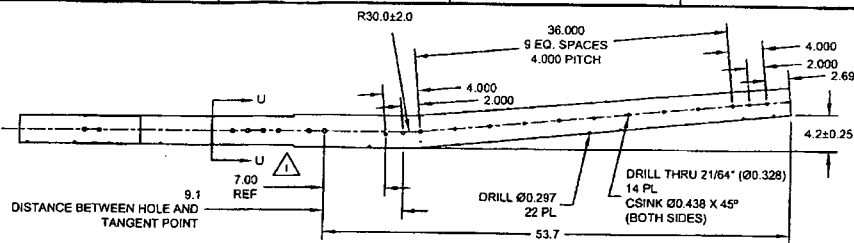
DETAIL S
SCALE 4X



VIEW W-W
SCALE 4X

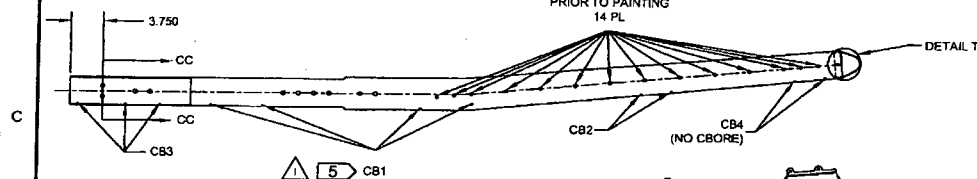
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| | | | |
|------------|----------|---|--------------|
| DESIGN | PH | DART AEROSPACE USA, INC | |
| DRAWN | XDF | KENT, WA | |
| CHECKED | | DRAWING NO. | REV. I |
| MFG. APPR. | | D3391 | SHEET 7 OF 8 |
| APPROVED | | TITLE | SCALE |
| DE APPR. | | 412 FLOAT SKIDTUBE | NTS |
| DATE | 11.10.13 | <small>COPYRIGHT © 2005 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small> | |



D3391-015 BENDING AND DRILLING DETAIL
(SEE CBORE DETAIL BELOW)

INSTALL D3670-4200 SPACER
SEAL WITH MAGNOBOND 6398
GRIND FLUSH
PRIOR TO PAINTING
14 PL



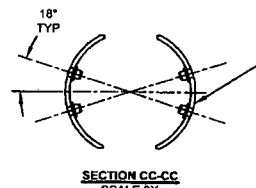
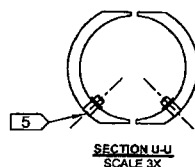
D3391-015 ASSEMBLY AND CBORE DETAIL
(SEE TABLE)

D3391-015/-025 AFT TUBE ASSEMBLY PARTS LIST

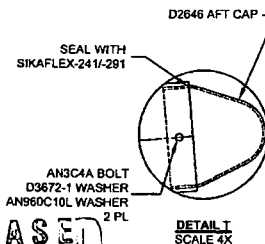
| QTY - 015 | QTY - 025 | PART NUMBER | DESCRIPTION |
|-----------|-----------|---------------|-------------------|
| X | X | D3391-015 | AFT TUBE ASSEMBLY |
| | | D3391-025 | AFT TUBE ASSEMBLY |
| 1 | 1 | D2646 | AFT CAP |
| 14 | 4 | D3670-4200 | SPACER |
| 2 | 2 | D3672-1 | WASHER |
| 1 | 1 | D4095-049 | WEARPAD |
| 1 | 1 | D4095-047 | WEARPAD |
| 1 | 1 | D6014-090 | AFT TUBE |
| 14 | 14 | AELS-1032-130 | INSERT |
| 8 | 8 | AELS-1032-225 | INSERT |
| 4 | 4 | ALS4-428-165 | INSERT |
| 6 | 6 | AN3C4A | BOLT |
| 4 | 4 | AN3C5A | BOLT |
| 10 | 10 | AN960C10L | WASHER |

CBORE HOLES MARKED CB1-CB4 AS FOLLOWS AND
INSTALL AELS-1032-XXX AFTER FINISH AS NOTED

| HOLES MARKED | QTY D3391-015 | QTY D3391-025 | CBORE | P/N |
|--------------|---------------|---------------|----------------|---------------|
| CB1 | 8 | 8 | Ø0.430 X 0.170 | AELS-1032-225 |
| CB2 | 4 | 4 | Ø0.430 X 0.170 | AELS-1032-130 |
| CB3 | 6 | 6 | Ø0.430 X 0.040 | AELS-1032-130 |
| CB4 | 4 | 4 | NONE | AELS-1032-130 |



DRILL Ø0.391
CBORE Ø0.516 X 0.040 DEEP
INSTALL ALS4-428-165 INSERT
4 PL



RELEASED
2011-11-04

| | | | |
|---------------|-----|---|-----------|
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| CHECKED | | DRAWING NO. D3391 | REV. 1 |
| MFG. APPR. | | SHEET 8 OF 8 | |
| APPROVED | | TITLE 412 FLOAT SKIDTUBE | SCALE NTS |
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